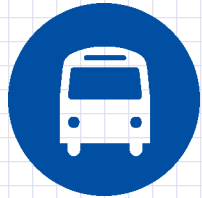


6.0 - Balanced Transportation

6.1 - Introduction



Primary travel modes change over time. They shape, and are shaped by, land use patterns. Grand Rapids' citizens support the coordination of transportation and land use decisions to reduce dependence on the automobile, provide choice in travel modes and to balance needs for automobile and truck access with the long term objectives of improving transit, making streets more walkable and creating a system of bike routes.



Why Do We Need a Balanced Transportation System?

The citizens of Grand Rapids expressed the following beliefs about the importance of a balanced transportation system that not only serves the automobile but pedestrians, cyclists, and transit riders as well.

- Good public transportation contributes to a healthy region, city and neighborhoods.
- We must pursue alternate means of transportation so that we don't just rely on the car.
- Our streets should be made comfortable for pedestrians, the handicapped and others (bikes, strollers, delivery carts, etc.).
- Good pedestrian environments in business areas compliment good automobile access.
- A good network of streets promotes easy access and often attracts businesses to an area.
- Our streets should be well paved and well marked.
- Multiple bus routes make neighborhoods more desirable.
- Making and maintaining streets as comfortable places for pedestrians is important.
- High volumes of low speed traffic are good for business areas.
- The city should be built for people, not cars.
- Bikes are an important consideration in the design of our streets and should be safely accommodated.

The city's interconnected network of streets, alleys and sidewalks allows people to move from one place to another efficiently. The need for a balanced transportation system that offers alternatives to the automobile was strongly expressed by the public throughout the planning process. These alternatives can reduce automobile dependency and associated parking needs, as well as increase the accessibility of jobs to the Grand Rapids workforce.



Participants were actively involved in the decision-making process for the plan.

6.2 - Visions

One of the first steps of the master plan process was to ask the citizens of Grand Rapids what they would like to see the city look like twenty years from now. At the first community forum more than 300 people came together to discuss the future of Grand Rapids. Their discussion was guided by the information gathered during a series of neighborhood and business association meetings and discussion guide responses collected in the first two months of the planning process. Eleven major categories summarized key issues and provided participants a variety of discussion topics from which to choose. The beliefs and issues used at the forum were developed from the strengths, weaknesses, opportunities and threats identified previously. Statements and images that described a vision, or preferred future, for Grand Rapids were then created by forum participants in small groups. The following visions emerged.

6.2.1 - Automobile Alternatives

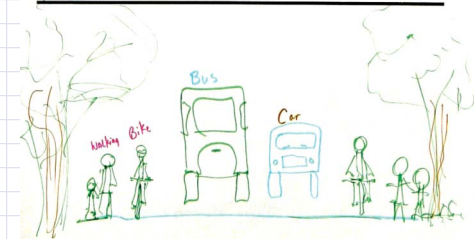
We will plan land use and transportation in our city and the region to make transit convenient and affordable. All residents will be able to get to work, school, recreation opportunities or shopping without relying on a car. Because our state-of-the-art transit system will be such a success, parking demand will be significantly reduced and we will be able to devote less land to storing parked cars. In most neighborhoods, residents will have access to daily, convenient shopping and services within walking distance of home. Our streets will create a connected network and will be designed to encourage walking and cycling; information on walk/bike routes will be easily available. We will emphasize the importance of tree-lined, people-friendly streets in our neighborhoods. Traffic calming will contribute to safer streets for drivers and more livable neighborhoods for all residents – especially our children. Most important, our overall transportation system will offer a balance between cars, transit, cyclists and pedestrians.



Topic: *Sustainable Envir. Design*
Issue: *Balanced Transp. System*

We envision the city of Grand Rapids with a balanced transportation system. One that includes pedestrian filled sidewalks, separate bike paths, and a strong commuter system that is used by all.

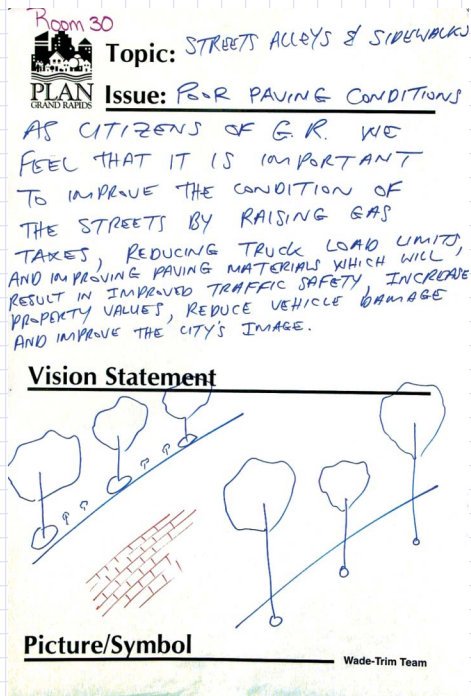
Vision Statement



Picture/Symbol

Wade-Trim Team



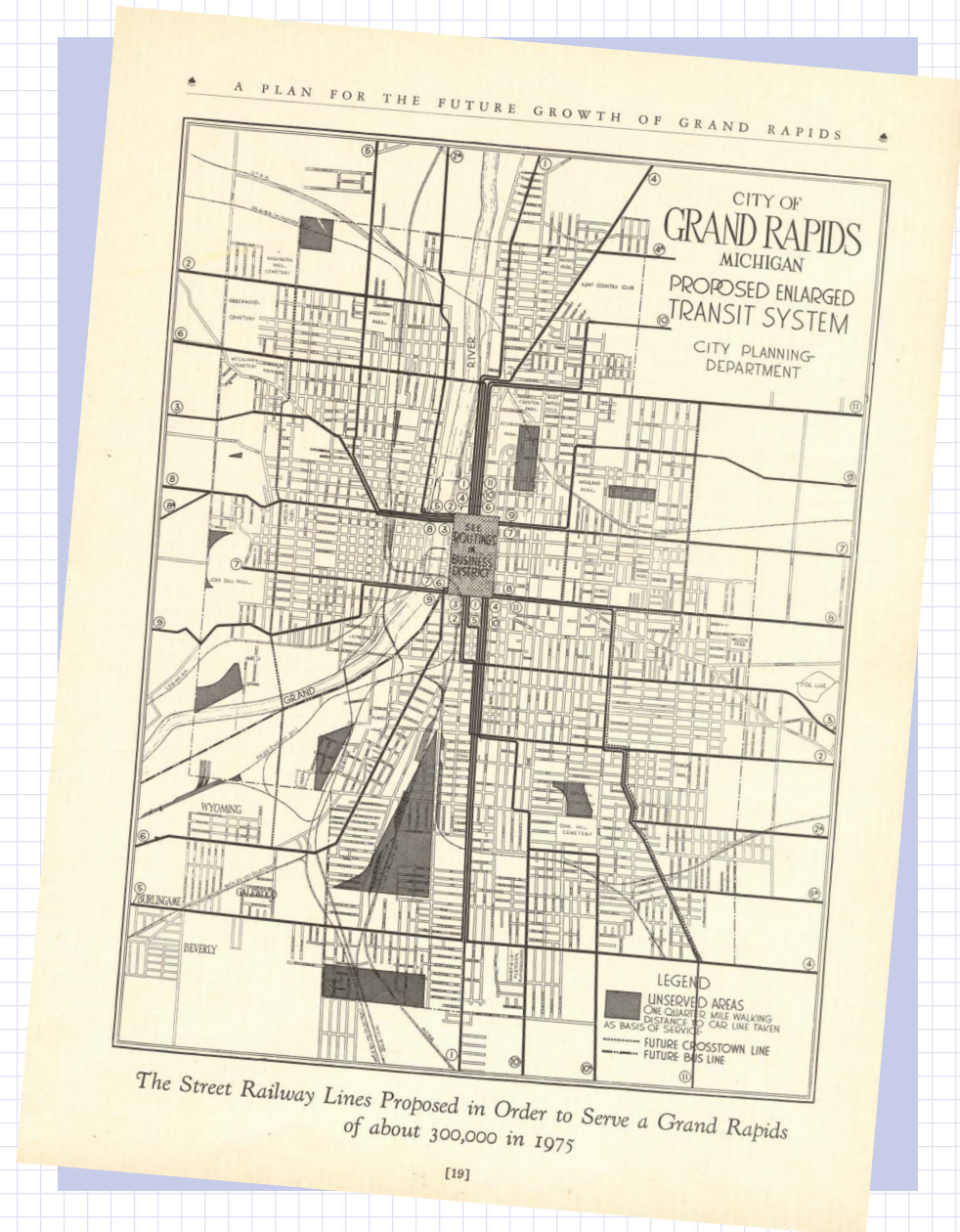


6.2.2 - Well Designed Street Network

Despite carrying greater traffic volumes at major streets will be designed to be people-friendly. We will make sure that street paving is in good condition by investing in improved longer-life materials and carefully managing truck load limits. As a result, vehicle damage will be significantly reduced and traffic safety will be improved. Attractively landscaped, safe, clean, well maintained streets will be an important part of our city's positive image and quality of life.

Posters are from the first Master Plan Community Forum held at Central High School in March 2001.

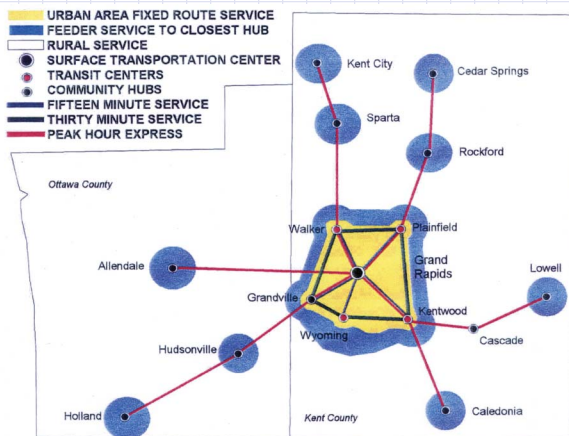
The 1923 Master Plan Recommended Streetcar Improvements to Relieve Traffic Congestion.





Balancing the use of street rights-of-way to accommodate auto, transit, pedestrian and bicycle lanes is important.

Figure 6.a - GVMC Long-Range Public Transportation Plan



6.3 - Plan Recommendations

The 1994 Grand Valley Metro Council (GVMC) *Blueprint Report* and the 1996 *Long-Range Public Transportation Plan for the Grand Valley Region* (Metro Mobile 2020 Task Force, Grand Rapids Area Transit and GVMC) provide a conceptual foundation for coordinating transportation and land use decisions to reduce dependence on the automobile and provide choice in travel modes. The Master Plan builds on this foundation to promote coordinated land use and transportation decisions that:

- support transit use through coordinated land use, site planning and street design decisions;
- balance the use of street rights-of-way to accommodate pedestrian and bicycle needs, as well as moving vehicles;

- design streets to enhance safety, improve walkability and create image corridors;
- reduce the extent to which highways create barriers to movement;
- manage parking supply and demand and improve parking lot location and design;
- provide bike routes.

6.3.1 - Transit

Planning Background

The 1996 *Long-Range Public Transportation Plan for the Grand Valley Region* recommends the development of a transit system linking outlying community hubs in Kent and Ottawa Counties to and through the City of Grand Rapids via express and high frequency service bus routes.

Because the locations of these routes are important factors in land use decision-making, an effort has been made to interpret the regional concept and to identify potential alignments within the city (Figure 6.a - GVMC Long-Range Public Transportation Plan - Page 78). High frequency ridership bus routes have also been mapped to assist in future land use planning. Finally, the regional transit organization (the Interurban Transit Partnership, or ITP) is undertaking an evaluation of alternative fixed guideway routes and transit modes as part of the regional system. Although early thinking about these alternative routes has also been used in developing the Future Land Use Map, the conclusions of this evaluation could modify land use planning (and development density decisions) within the city.

Future Land Use

Land use decisions must be coordinated with efforts to improve and expand transit service, and to create a balanced transportation system that reduces dependence on the automobile. More compact devel-



opment patterns and higher development densities in some areas of the city will concentrate travel origins and destinations to support more efficient transit operation. Several land use recommendations that reinforce efforts to make transit a viable transportation choice have been described in preceding chapters, including:

- directing higher housing densities to locations on, or within walking distance, of major transit routes (see *Chapter 3 - Great Neighborhoods - Page 27*);
- encouraging the creation of compact, walkable mixed-use centers located on existing high ridership bus routes and proposed high frequency service, express and fixed guideway routes (see *Chapter 4 - Vital Business Districts - Page 47*);
- encouraging the location of major job centers on transit routes and the provision of incentives for employees to choose the bus over commuting by car (see *Chapter 5 - A Strong Economy - Page 63*).

As noted above, the fixed guideway location(s) to be recommended by ITP will have an impact on the location of several proposed village mixed-use centers. These alternative village center locations include South Division Avenue at Cottage Grove and 28th Street west of Breton, as illustrated on the *Future Land Use Map* (Figure 2.a - Page 21) and the *Transportation Framework: Transit Map* (Figure 6.b - Page 79).

Site Planning and Street Design

The way that buildings and parking are arranged on a site has a significant impact on the ease with which transit users can move between transit stops and the front doors of buildings. Large parking lots located adjacent to the street establish a barrier to pedestrian movement between bus stops and buildings. Existing development can be retrofitted in a variety

Figure 6.b - Transportation Framework: Transit

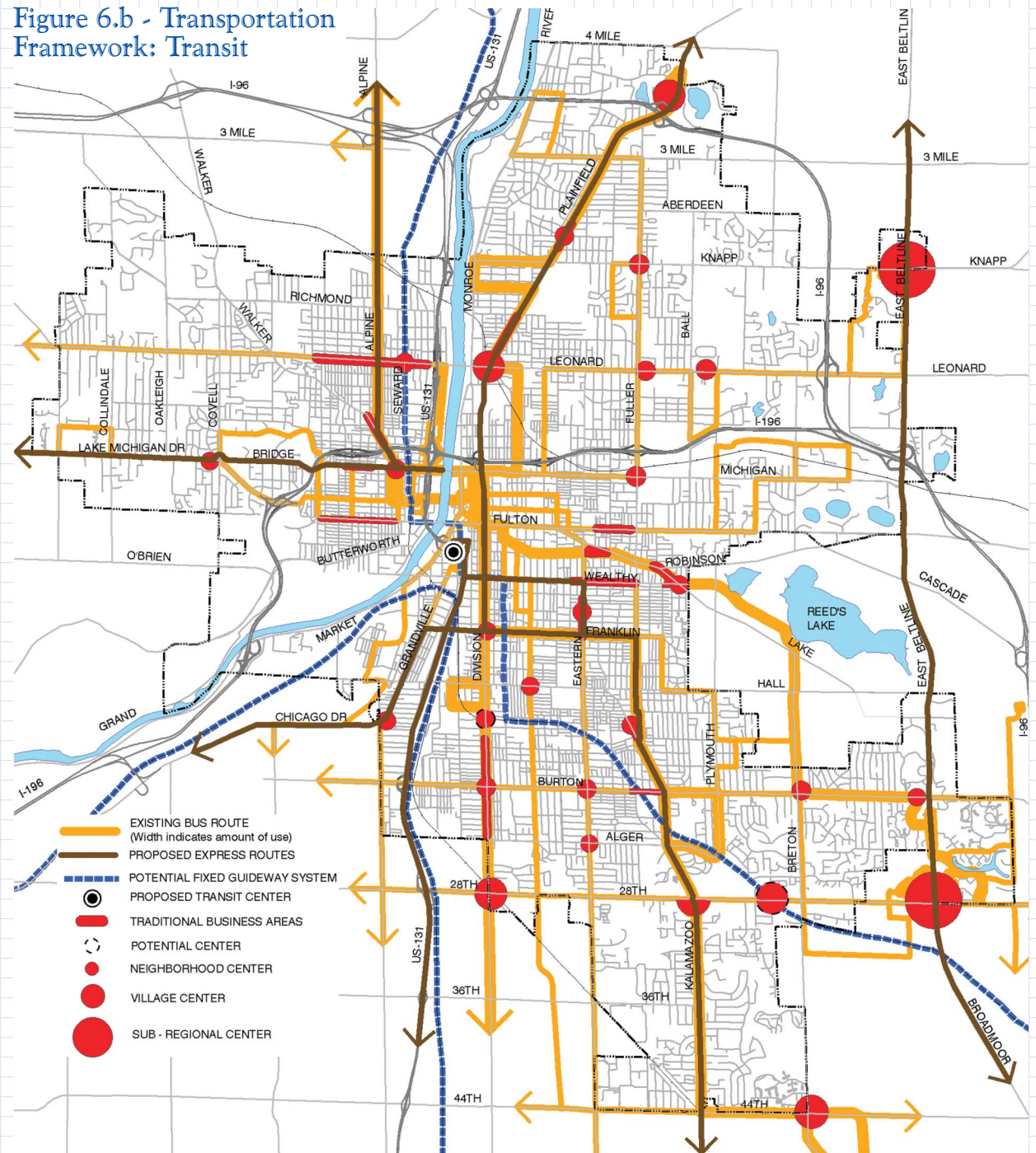
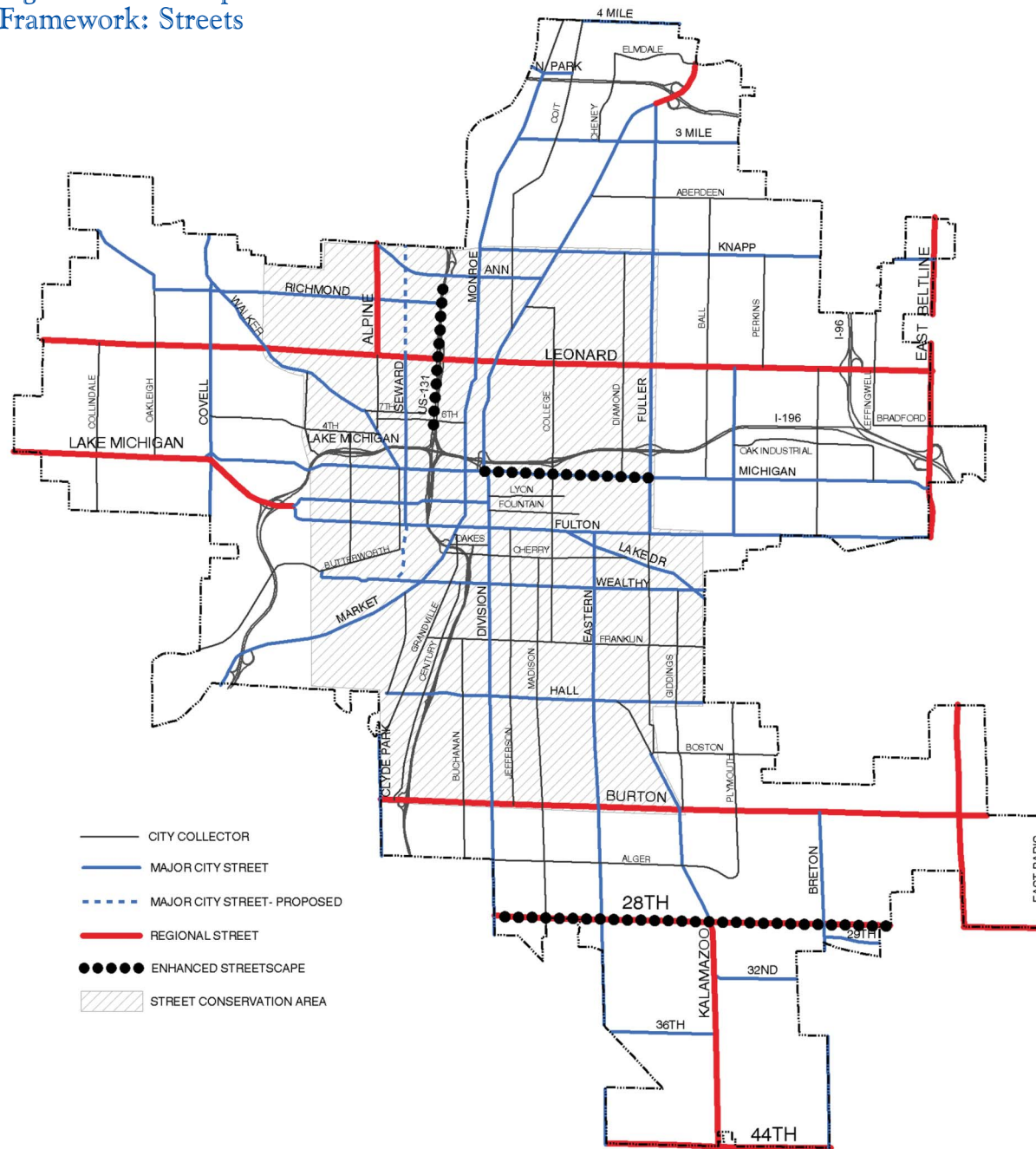


Figure 6.c - Transportation Framework: Streets



of ways to reduce the extent to which parking lots discourage pedestrian connections. (See Section 10.8 - Auto-Oriented Commercial in a Post-World War II Context - Page 135 for one example.) A more efficient pattern for bus operation and transit riders, however, is to locate buildings on or near the front property line, with parking located to rear. This is especially important at major job centers and in neighborhood, village and sub-regional mixed-use centers.

Similarly, the planning and design of street improvements should take transit vehicles and riders into consideration, for example by providing bus shelters, benches and bays that allow buses to pull out of roadway travel lanes. At major transit connection points, a configuration that accommodates more than one bus at a time, and that is located off the major through-traffic street, may also be appropriate. (See Supplement B, for examples of how a major transit connection might be accommodated in the village mixed-use centers proposed at Plainfield/Leonard and 28th/Division.)

6.3.2 - Streets

Streets must be designed to allow cars, trucks, transit and emergency vehicles access throughout the city. People in Grand Rapids also want streets that are attractive and safe. Along with parks, squares and plazas, the city's streets are major determinants of the quality of the public realm. When they are improved to create a positive image, and provide a pleasant environment for people on foot and on bicycles, they can serve as a powerful economic development tool. To achieve this, decisions on street design, traffic management, parking, land use and development character must be coordinated.

Street Design

The city has already established guidelines to better balance the use of space within public rights-of-way in the 1996 *Street Classification Policy*. Street functional



classifications (*regional, major, city collector as shown in Figure 6.c - Transportation Framework: Streets Map - Page 80*) are coordinated with development categories and design guidelines. These guidelines balance the need to move vehicles with the creation of a street environment that accommodates on-street parking, transit stops, pedestrians and cyclists. A Street Conservation Area is also defined, encompassing the majority of the city's older neighborhoods where streets are narrower than modern standards. Within this area, street reconstruction and widening projects require Planning Commission approval to ensure that streetscape and pedestrian amenities are not sacrificed.

The Master Plan reaffirms these policies and guidelines and recommends that they be augmented in preparing future neighborhood and area-specific plans that interpret the Master Plan's recommendations in greater detail. These area-specific plans should designate pedestrian priority streets and coordinate land use decisions and development guidelines with those designations.

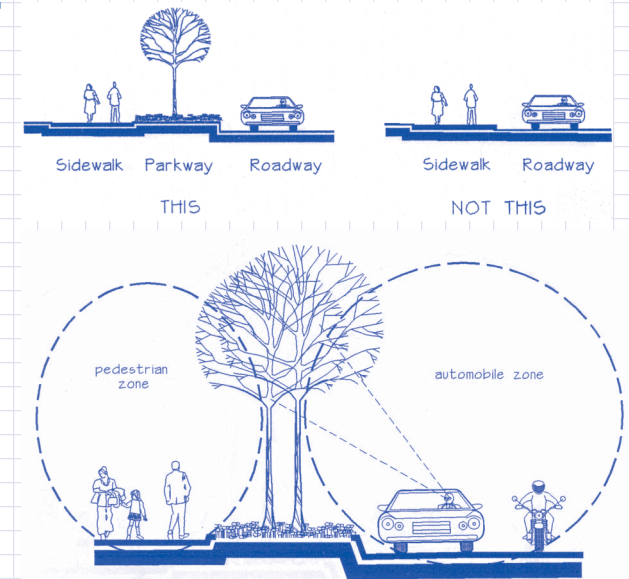
Safe Streets - Recent research suggests that slower travel speeds mean safer streets with fewer accidents and injuries. Like many cities, Grand Rapids is now undertaking traffic calming projects that slow traffic by effectively narrowing the perceived street width, using curb bump-outs and small diameter roundabouts located at intersections. The Master Plan recommends a continued coordinated approach and financial support for these initiatives (on both residential and shopping streets) to ensure that faster moving traffic is not simply displaced from one street to another. In addition, for new development projects, standards that allow narrower street widths should be considered.

Walkable Streets - Even streets that carry high volumes of traffic can act as seams, rather than barriers between neighborhoods if they are designed to:

- provide streetscapes that create a comfortable, human scale environment;
- include on-street parking and planting zones to protect pedestrians from travel lanes;
- use traffic calming techniques to slow vehicles; and
- provide well defined crossing points.

The location and treatment of off-street parking, and the number and design of driveways (especially those serving non-residential uses) also influence walkability. Parking lots located adjacent to the sidewalk, especially if they occupy significant street frontage and/or are not softened and screened by landscaping, create an environment that is not hospitable to people on foot. In contrast, buildings located close to the sidewalk, with entries, windows and/or storefronts oriented to the street, create a sense of human scale and add activity and visual interest. This model can be applied to residential, commercial, institutional or industrial development, but it is essential in the core of the city's traditional business areas and neighborhood, village and sub-regional mixed-use centers. (See 10.4 - *Traditional Business Area - Page 127 for one example.*)

In addition to the design of the street environment, the design of the larger street network has an impact on walkability. Streets that create connections within and between neighborhoods, and to shopping, jobs, parks and schools, are needed. Small blocks and variations on a grid of streets multiply connections; large blocks and cul-de-sacs limit connections (see Section 10.9 - *Higher Quality Medium and High-Density Residential Design - Page 137*). Finally, the distribution of land uses influences walkability. As a result, the Master Plan recommends encouraging mixed-use development that locates homes, shopping, jobs, and schools within easy walking distance of one another.



Illustrations from the Street Classification Policy that show how to create a pedestrian friendly streetscape.





Division Avenue is an important image street (rendering from the Heartside Mainstreet Charette).

Image Streets - Certain high traffic volume streets that serve as gateways to Grand Rapids, especially those on which the addition of higher density residential development will be encouraged, deserve special treatment to create a positive image for the city overall and to enhance their appeal as reinvestment locations. Boulevard treatments or other similar enhancements – for example, street tree plantings, improved sidewalk paving, street signs and street lights – on these streets would dramatically improve their appearance.

The Master Plan identifies 28th Street, Division Avenue and Michigan Street west of Fuller as important image streets (Figure 6.c - *Transportation Framework: Streets Map* - Page 80). Other gateway streets that should be considered as image streets include North Monroe, Fulton, Leonard, Plainfield, Lake Michigan Drive, Market and Grandville. The engineering and cost feasibility of creating enhanced streetscape on these streets should be given special consideration.

Street Redesign Studies - Several additional street redesign studies were suggested by community participants during the preparation of the Master Plan. These include:

- East Leonard Street, from Plainfield to East Beltline, where the varying number of lanes and lane configurations create bottlenecks and safety concerns;
- Seward Avenue, where extensions north to Ann Street and south to Wealthy Street would provide a continuous north-south surface street connection on the Near West Side.

6.3.3 - Highways

Limited access highways within a city often create significant barriers by limiting or eliminating street connections and/or ignoring pedestrian and bicycle needs in the design of underpasses and bridges. In Grand Rapids, the design of US-131 – especially on the west bank of the Grand River to the north of Downtown – is an extreme example of this phenomenon. The Master Plan recommends that strategies for eliminating or minimizing this barrier be explored to reconnect Near West Side neighborhoods to the river. (See Chapter 7 - *A Community that Enriches Our Lives* - Page 89.) In the longer term, when major reconstruction of this segment of US-131 is being planned, the Master Plan recommends that the possibility of eliminating the US-131 embankment be explored to create an at-grade urban boulevard (with appropriate surface street travel speeds) between Ann Street and I-196. In conjunction with this redesign, east-west streets should be extended to the riverfront. Although it may take decades for this recommendation to be implemented, interim steps can be taken to reduce the barrier that the US-131 embankment creates. These include improving the existing pedestrian tunnel at 10th Street and creating new street

extensions and underpasses at 7th and/or 8th Street where there is adequate vertical clearance.

As other highway improvements are planned, designed and implemented on both US-131 and I-196, the Master Plan recommends that opportunities for improving street connectivity and enhancing pedestrian and bicycle access (by widening sidewalks and adding bike lanes) be given serious consideration. This will require coordination among city departments and neighborhood and business organizations, as well as the Michigan Department of Transportation.

6.3.4 - Parking

Parking is a complex and controversial planning issue. Nevertheless, a balanced transportation system must include a balanced approach to parking management. Critical parking management variables include:

- the amount of off-street parking required for different land uses and types of development;
- the way in which off-street parking is located and designed;
- the availability of on-street parking; and
- how the costs for both on- and off-street parking are assigned and who bears those costs.

Decisions on how parking is managed can have a tremendous influence on neighborhood livability, business district vitality, the cost and financial feasibility of new development and the price of housing and other real estate for sale or rent. Parking management can also affect the following:

- individual decisions on whether to take the bus, cycle or walk - rather than finding, and possibly paying for, a place to park a private automobile;
- the amount of traffic on city streets (and the air quality impacts of tail pipe emissions);

- the amount of impermeable, paved land area and the volume (and pollutant loading) of surface runoff; and
- the extent to which compact, walkable development patterns can be achieved.

Supply

Like many other cities, Grand Rapids specifies a minimum number of off-street parking spaces that must be provided for different types of land uses in its current zoning code. These minimum parking requirements appear to be based on national standards geared to suburban, rather than urban, development patterns. With the exception of the Downtown area, the same standards apply no matter where in the city a particular use is located. This approach fails to reflect differences in actual parking demand patterns or to take advantage of the potential to use variations in parking requirements as an incentive in implementing both transportation and development objectives.

The Master Plan recommends that alternative approaches to parking management be explored. For example, the city could adopt lower parking requirements - or replace parking minimums with parking maximums - in those portions of the city that are located within easy walking distance of transit routes (including job centers) or are designed to incorporate a mix of housing, jobs, retail and services. This would provide a potentially significant financial incentive to encourage mixed-use development, the restructuring of traditional business areas and the creation of neighborhood, village and sub-regional centers. Similarly, available on-street parking could be counted in meeting total parking requirements to reduce the area that must be devoted to surface parking lots.

In many instances, shared parking lots (and decks) that serve the needs of a district are a more land



Improving access under US 131 to connect West Side neighborhoods to the Grand River should be given serious consideration.





Parking areas should be designed for minimal impact on the visual quality and pedestrian orientation on the street.

efficient and cost effective parking strategy than requiring each property owner to provide his/her own off-street parking. This shared parking approach is especially helpful in maintaining a more compact development pattern and a continuous block face. The Master Plan recommends that shared parking also be encouraged to ensure that uses which experience differing peak parking demands do not provide redundant parking. In areas where incentives for reinvestment are needed, the city may play a more active role in planning and developing shared district parking lots or ramps.

Initiatives for managing the supply of parking, especially in the older parts of the city, require coordinated efforts to avoid the potential negative effects of parking spillover onto neighborhood streets. Many communities use resident permit parking programs to control these impacts.

Demand

New approaches for managing the supply of parking must be coordinated with strategies for managing parking demand. One of the most effective strategies for managing demand is to ask drivers to pay for the parking they use. This would make some of the true costs of parking more visible and distribute them more equitably. Another, less politically challenging, approach is the use of transportation demand management (TDM) programs. These programs require large employers to provide incentives for employees to use transit, car- or van-pools, or walk or cycle to work. Major employers can also be encouraged to develop financial incentive programs that allow and encourage employees to purchase homes within walking distance of work. These employer-assisted housing programs can take many forms, but often include low-interest loans and/or assistance with closing costs.

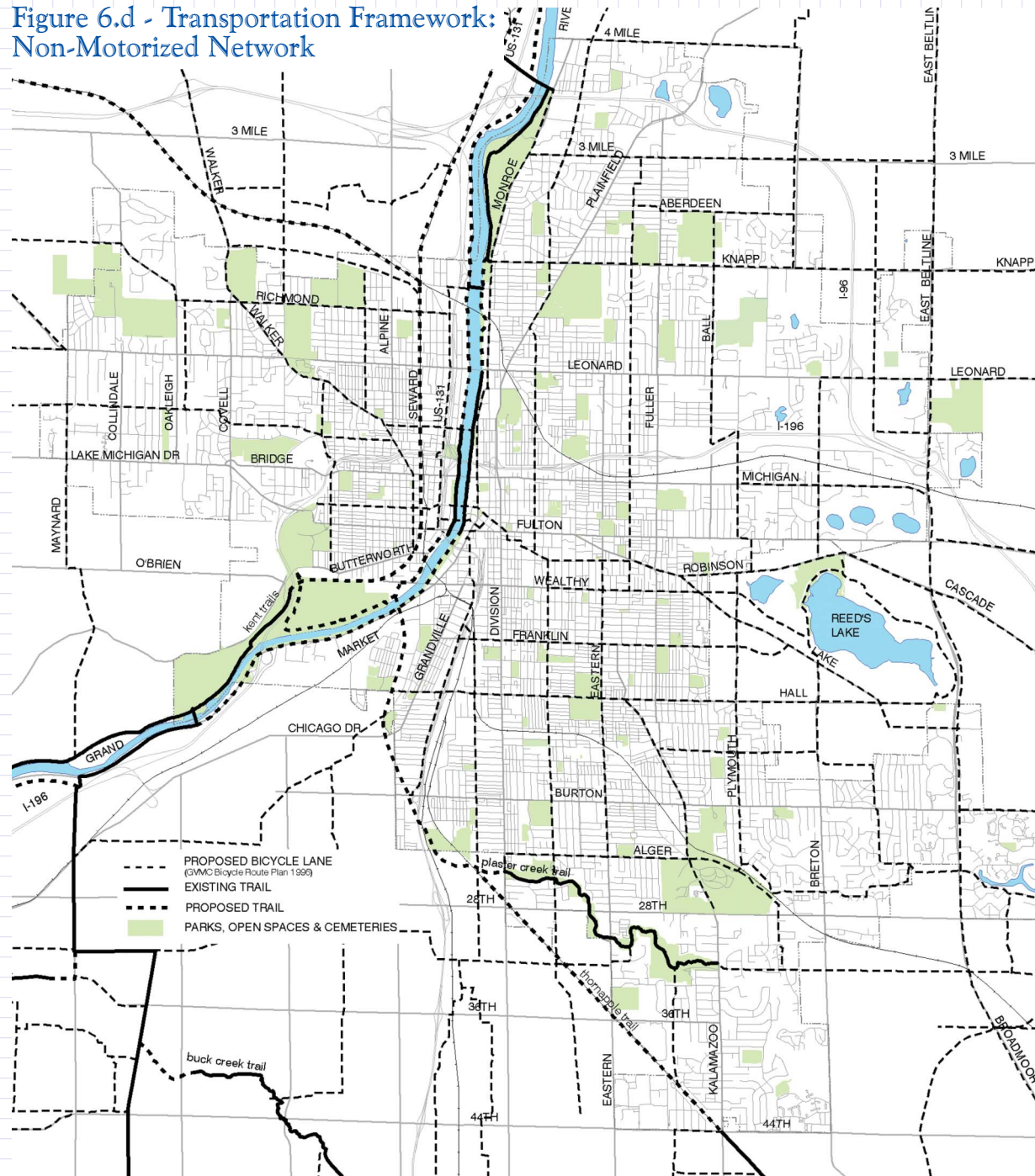
Design

The guidelines for mixed-use recommend that parking be located and designed to minimize its impact on the visual quality and pedestrian orientation of the street environment (*Chapter 10 - Development Character - Page 117*). In addition, all development - even on auto-oriented strip commercial corridors - should be required to provide landscape screening on parking lot edges adjacent to the street, as well as those adjacent to residential uses. Landscaping should be required within parking lots to provide visual relief, shade and a more human sense of scale. Wherever possible, these landscaped zones should also serve as runoff infiltration areas.

6.3.5 - Bike Routes

The bicycle element of the *Long Range Transportation Plan for the Grand Valley Region* (1996) proposes that 3% of all regional travel trips be made by bicycle in the short term and that 10% of all trips be converted to bicycle trips in the longer term. To accomplish these goals, energy and resources must be focused on providing more and better on-street bicycle facilities and bike paths that accommodate both recreational trips and trips to work, shopping and school. In the following chapter, the creation of a primary open space framework is recommended, composed of greenways and on-street bicycle/pedestrian corridors that link all areas of the city to major parks, the river and the developing county and regional trail network. The configuration of this primary open space framework, in combination with the bike routes proposed in the 1996 *Long Range Transportation Plan* (*Figure 6.a - GVMC Long-Range Public Transportation Plan - Page 78* and *Figure 6.d - Transportation Framework: Non-Motorized - Page 85*), should serve as a starting point in establishing priorities for future bike route planning and development.

Figure 6.d - Transportation Framework:
Non-Motorized Network



Reducing Car Dependence

Reducing dependence on the automobile and providing choice in travel modes yields many benefits.

- Increased mobility for the elderly, too young, or with means too limited to be able to drive a car.
- Reduced congestion and time spent in commuting.
- Increased convenience in reaching necessary travel destinations.
- Reduced need for land devoted to parking at multiple destinations.
- Tax revenues that can be re-allocated from roadways to other important purposes.
- Reduced consumption of nonrenewable resources and improved air quality.



Photo courtesy of ArtWorks Expanded Visions 2001 youth apprenticeship program.

6.4 - Objectives and Policies

The following objectives and policies summarize what needs to be done to achieve the vision and plan recommendations presented on the preceding pages so that Grand Rapids can effectively balance transportation modes. Above each objective is a line of theme icons. The icons illustrate how a particular objective is interrelated with another Master Plan theme. See Page 24 for a description of each theme.



Objective BT 1

Improve and expand transit service.

- Support implementation of the 1996 *Long-Range Public Transportation Plan*.
- Assist in assessing the feasibility of fixed guideway routes and alternative transit modes within the city and the region (*Figure 6.b - Transportation Framework: Transit Map - Page 79*).
- Coordinate land use and transportation planning to make transit convenient, efficient and affordable.
- Locate higher density housing on or within walking distance of transit routes.
- Encourage transit-supportive development densities in proposed neighborhood, village and sub-regional mixed-use centers.
- Ensure that major employment and activity centers are well served by transit.
- Encourage building placement and parking design that facilitate access to transit stops.
- Include transit-related improvements in the planning and design of street improvement projects.
- Ensure that transit is accessible to persons with disabilities.



Objective BT 2

Coordinate land use and transportation planning to provide safe and appropriate vehicular access to all areas of the city.

- Locate industrial and commercial land uses, and manage truck traffic, to avoid the use of residential streets.
- Balance through-traffic and commuter needs with the need for pedestrian quality in neighborhoods, neighborhood business districts and Downtown.
- Encourage the development of a connected street network that disperses traffic.
- Target roadway and streetscape improvements to assist in the revitalization of neighborhoods and business districts and encourage mixed-use development.
- Undertake a street redesign study on East Leonard Street from Plainfield to East Beltline.
- Extend Seward Avenue north to Ann Street and South to Wealthy Street.



Objective BT 3

Design all streets to be safe and walkable and to present a pleasing image of the city.

- Incorporate the recommendations and standards included in the city's *Street Classification Policy* (and updates) as part of the Master Plan (*Figure 6.c - Transportation Framework: Streets Map - Page 80*).
- Ensure that city streets are well paved and that streets and alleys are well lit, well landscaped and well maintained.
- Continue the coordinated use of traffic calming strategies to slow travel speeds and improve safety.

- d. Encourage the development of more walkable streets by:
 - cooperating in planting and maintaining street trees;
 - requiring safe and attractive sidewalk paving;
 - creating well defined cross walks;
 - promoting the placement of buildings close to the sidewalk with entries, windows and storefronts oriented to the street.
- e. Design residential streets for the minimum right-of-way and pavement width necessary for aesthetically pleasing walks and parkways, travel lanes, on-street parking and emergency vehicle access.
- f. Identify important city gateway corridors (e.g. 28th Street, South Division Avenue and Michigan Street west of Fuller); provide streetscape improvements (including possible boulevard treatments) to create a positive image for the city and attract reinvestment.
- g. Recognize the importance of alleys in traditional and urban neighborhoods and promote alley improvement projects.



Objective BT 4

Reduce the extent to which highways create barriers to movement between neighborhoods, business areas and the Grand River.

- a. Encourage the Michigan Department of Transportation (MDOT) to evaluate the feasibility of redesigning US-131 (from I-196 to Ann Street) as an at-grade urban parkway when major reconstruction is planned.

- b. Take immediate steps to reduce the barrier created by the US-131 embankment by improving the existing pedestrian tunnel and creating underpasses to extend 7th and/or 8th Street to the river's edge.
- c. Seek opportunities for improving street connectivity and pedestrian/bicycle access as highway improvements are planned, for example on I-196.



Objective BT 5

Encourage the more efficient provision of parking and reduce its impact on the city's appearance and walkability.

- a. Coordinate transit and parking strategies.
- b. Allow reductions in required off-street parking (or the replacement of required minimum amounts with maximum amounts) in areas that are within easy walking distance (1/4 mile) of transit routes and/or planned to incorporate a mix of housing, jobs, retail and services.
- c. Encourage shared parking; manage parking in neighborhood business areas on a shared, district-wide basis.
- d. Encourage the development of transportation demand management programs by major employers and at major employment and activity centers to reduce peak hour congestion and on-site parking needs.
- e. Adopt policies to avoid potential spillover parking on neighborhood streets (for example, resident parking permit programs).

- f. Establish regulations and incentives to locate and screen parking to minimize its impact on the view from the street.
- g. Develop policies to discourage demolition of buildings exclusively for surface parking use.
- h. Consider the feasibility of providing structured parking in densely developed business districts where extensive surface parking would negatively impact pedestrian character.
- i. To reinforce the role and importance of alleys in providing services to compact residential and commercial areas (e.g. garbage collection, utilities and parking) promote alley improvement projects.



Objective BT 6

Improve bicycle access.

- a. Prepare plans to guide the development of efficient and pleasant citywide bike routes that connect neighborhoods and link them to the Grand River, parks, schools, and business districts.
- b. Design bike routes to meet national standards.
- c. Encourage bike/transit linkages (e.g., bus bike racks; bike storage lockers at major transit stops).

